

**Louisiana Department of Environmental Quality
Office of Environmental Services**

STATEMENT OF BASIS

For

Activity Number: PER20060002

Permit No. 0040-00059-V2

Egan Gas Storage Facility

Agency Interest No. 24083

Egan Hub Storage, LLC

Evangeline, Acadia Parish, Louisiana

I. APPLICANT

Company

Egan Hub Storage, LLC
Post Office Box 1642
Houston, Texas 77251

Facility

Egan Gas Storage Facility
401 Ida Fruge Road, Evangeline, Acadia Parish, Louisiana 70537
UTM Coordinates: 540.94 kilometers East and 3347.50 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS

Egan Gas Storage Facility compresses pipeline natural gas for storage in the Jennings Salt Dome caverns and delivery on demand from storage to pipelines. Upon withdrawal, natural gas is filtered, dehydrated, and then injected into a sales pipeline. VOC emissions from the glycol regenerator still column vents are controlled by two thermal oxidizers. Off-gas from the glycol pump flash separators (GPFS) is used as supplemental fuel at the glycol reboilers or destroyed at the thermal oxidizers. Any excess flash gas is vented to the atmosphere. Emissions are from compressors and generators engines, glycol dehydrators, thermal oxidizers, tanks, turbines, heaters, pneumatic pumps, a parts washer, loadings, and fugitives. The Egan Gas Storage Facility currently operates under Permit 0040-00059-V1, dated April 10, 2006.

III. PROPOSED PERMIT / PROJECT INFORMATION

Proposed Permit

A Part 70 operating permit application and Emission Inventory Questionnaire dated November 28, 2006 as well as additional information dated January 25, 2007 were submitted requesting a Part 70 operating permit modification.

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A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, and in the local newspaper. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List. The application and proposed permit were submitted to the Acadia Parish Library. The proposed permit was submitted to US EPA Region 6. All comments will be considered prior to the final permit decision.

Project description

Egan Hub Storage proposed to increase working capacity of the facility from 24 to 32 billion cubic feet. Egan Hub Storage requested a permit modification to 1) replace an emergency generator, 2) add a generator fuel gas heater, a turbine fuel gas and high pressure seal gas heater, and a generator, and 3) consolidate operating limits of all compressor engines into an emission cap.

Permitted Air Emissions

Permitted emissions from the terminal in tons per year are as follows:

Pollutant	Permitted	Proposed	Change
PM ₁₀	13.59	17.58	+ 3.99
SO ₂	4.52	4.70	+ 0.18
NO _x	186.13	206.26	+ 20.13
CO	57.43	61.13	+ 3.70
VOC, total	88.13	97.50	+ 9.37

Prevention of Significant Deterioration (PSD) Applicability

Emissions of the criteria pollutants from the facility are less than the PSD major source threshold of 250 tons/year. Therefore, PSD analysis was not required.

Maximum Achievable Control Technology (MACT) requirements

Emissions of Toxic Air Pollutants (TAPs) from the terminal are less than the major source threshold. MACT is not required. Formaldehyde emissions are from natural gas fired engines and turbines and are exempt from the Louisiana Air Toxic Regulations.

Air Modeling Analysis

Emissions from these units are not expected to cause or to contribute to any National Ambient Air Quality Standards (NAAQS) or Ambient Air Standards (AAS) exceedances.

Dispersion Model Used: None

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General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the draft Part 70 permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section IX of the proposed Part 70 permit. The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the proposed permit.

IV. PERMIT SHIELDS

The Permit does not include any Permit Shields

V. PERIODIC MONITORING

The Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the proposed permit. Federally enforceable conditions are used to limit the operating time of the compressor engines. Permittee will monitor monthly operating time and twelve consecutive month total operating time. The total compressor engine operating time is reported annually.

VI. APPLICABILITY AND EXEMPTIONS OF SELECTED SUBJECT ITEMS

ID No:	Requirement	Status	Citation	Explanation
EQT001 - EQT013 EQT053	LAC 33:III.1503.C. Emission Standards for Sulfur Dioxide	Exempt	LAC 33:III.1503.C	SO ₂ emissions < 250 tons/year
	LAC 33:III.1511 CEM for SO ₂	Exempt	LAC 33:III.1511.A	SO ₂ emissions < 100 tons/year
	NESHAP Subpart ZZZZ for IC engines	Does not apply	40 CFR 63.6590(b)(3) 63.6590(a)	Existing four strokes lean burn (4SLB) engines or < 500 horsepower

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ID No:	Requirement	Status	Citation	Explanation
EQT014, EQT015	LAC 33:III.1503.C. Standards SO ₂	Exempt	LAC 33:III.1503.C	SO ₂ emissions < 250 tons/year
	LAC 33:III.1511 CEM for SO ₂	Exempt	LAC 33:III.1511.A	SO ₂ emissions < 100 tons/year
EQT022, EQT023, EQT026	40 CFR 60 Subpart Kb	Does not apply	40 CFR 60.110b(a)	Volume < 20,000 gallons
EQT024, EQT025, EQT044, EQT045	40 CFR 60 Subpart Kb	Does not apply	40 CFR 60.110b(b)	Vapor Pressure < 0.51 psia
EQT027, EQT028, EQT034	LAC 33:III.2107	Does not apply	LAC 33:III.2107	Vapor Pressure < 1.5 psia or throughput < 20,000 gallons/day
EQT035, EQT036, EQT041, EQT042	40 CFR 63.1275, 63.1283, 63.1284, and 63.1285	Exempt	40 CFR 63.1274(d)(2)	Benzene emissions < 1.0 tons/year
EQT046, EQT047	LAC 33:III.1503.C. Standards SO ₂	Exempt	LAC 33:III.1503.C	SO ₂ emissions < 250 tons/year
	LAC 33:III.1511 CEM for SO ₂	Exempt	LAC 33:III.1511.A	SO ₂ emissions < 100 tons/year
	40 CFR 63.1275, 63.1283, 63.1284, and 63.1285	Exempt	40 CFR 63.1274(d)(2)	Benzene emissions < 1.0 tons/year
EQT049, EQT050	LAC 33:III.1503.C. Standards SO ₂	Exempt	LAC 33:III.1503.C	SO ₂ emissions < 250 tons/year
	LAC 33:III.1511 CEM for SO ₂	Exempt	LAC 33:III.1511.A	SO ₂ emissions < 100 tons/year
	40 CFR 60 Subpart GG	Exempt	40 CFR 60.4305(b)	Subject to 40 CFR 60 Subpart KKKK
	40 CFR 63 Subpart YYYY	Does not apply	40 CFR 63.6085	Not a major source of HAP
FUG001	LAC 33:III.2121 – Fugitive Emission	Does not apply	LAC 33:III.2121.A	Not an affected facility
GRP005	LAC 33:III.2104 – Flash Gas	Does not apply	LAC 33:III.2104.A	VOC emissions from flash gas < 100 TPY
	LAC 33:III.Chapter 51	Exempt	LAC 33:III.5105.B.3	TAP emissions are from combustion devices that burn virgin fossil fuels
	LAC 33:III.Chapter 59 40 CFR 68	Does not apply	LAC 33:III.5901	Facility does not store or process any referenced list substance greater than the threshold amounts.

The above table provides explanation for both the exemption status or non-applicability of a source cited by 2 or 3 in the matrix presented in Section X of the permit

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VII. STREAMLINED REQUIREMENTS

The Permit does not include any streamlined requirements.

VIII. GLOSSARY

Best Available Control Technologies (BACT) - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

CAM - Compliance Assurance Monitoring rule – A federal air regulation under 40 CFR Part 64

Carbon Black - A black colloidal substance consisting wholly or principally of amorphous carbon and used to make pigments and ink.

Carbon Monoxide (CO) – (Carbon monoxide) a colorless, odorless gas produced by incomplete combustion of any carbonaceous (gasoline, natural gas, coal, oil, etc.) material.

Cooling Tower – A cooling system used in industry to cool hot water (by partial evaporation) before reusing it as a coolant.

Continuous Emission Monitoring System (CEMS) – The total combined equipment and systems required to continuously determine air contaminants and diluent gas concentrations and/or mass emission rate of a source effluent.

Cyclone – A control device that uses centrifugal force to separate particulate matter from the carrier gas stream.

Duct Burner – A device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Federally Enforceable Specific Condition - A federally enforceable specific condition written to limit the potential to Emit (PTE) of a source that is permanent, quantifiable,

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and practically enforceable. In order to meet these requirements, the draft permit containing the federally enforceable specific condition must be placed on public notice and include the following conditions:

- A clear statement of the operational limitation or condition which limits the source's potential to emit;
- Recordkeeping requirements related to the operational limitation or condition;
- A requirement that these records be made available for inspection by LDEQ personnel;
- A requirement to report for the previous calendar year.

Grandfathered Status- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

Heat Recovery Steam Generator (HRSG) – A steam generator that recovers exhaust heat from a gas turbine, and provides economizing and steam generation surfaces.

Hydrogen Sulfide (H₂S) - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

NESHAP - National Emission Standards for Hazardous Air Pollutants –Air emission standards for specific types of facilities, as outlined in 40 CFR Parts 61 through 63

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

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NSPS - New Source Performance Standards – Air emission standards for specific types of facilities, as outlined in 40 CFR Part 60

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH_4), Ethane (C_2H_6), Carbon Disulfide (CS_2)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM_{10} - Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.